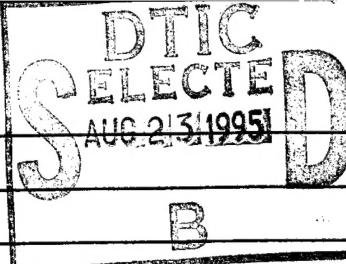


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OPERATIONAL FIRE! STRATEGIC IMPACT?

by

Thomas G. Smith

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of

OPERATIONAL FIRE! STRATEGIC IMPACT

The current trend in U.S. military thinking toward a more Joint approach to warfare ignores the truly decisive impact that air and naval forces have had since the end of the second world war. U.S. preponderant force, political influence, and technological edge have provided a unique opportunity for our military to fight and win decisively from the air and sea without undue risk to our ground troops. Historical evidence from World War II and most recently the Persian Gulf War highlight the strategic impact of air and naval forces and point the way toward a future where the role of ground forces will be reduced in many situations across the operational spectrum.

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The current trend in U.S. military thinking toward a "joint" only approach to warfare ignores the truly decisive impact that air and naval forces have had since the second world war and threatens to confine the U.S. Navy and Air Force to secondary/supporting roles in the future where U.S. military response will seemingly continue to be built upon the tried and true, but extremely antiquated notion that war can only be finally won by combat infantry in ground operations.

Operational Fire! Strategic Impact?

It is my contention and in this paper I hope to show, that contrary to the prevailing "Jointness craze" we have immersed ourselves in, there continues to be opportunities where the application of air and naval power (singly or in combination) provide the best means of achieving the military conditions necessary for victory.

The tactical weapon systems available on U.S. ships and aircraft can provide the decisive impact required for victory in a military campaign. Since World War II the ability of naval and air forces to provide this "operational fire" has only increased and is verging on the possibility of reducing the role of ground forces to an auxiliary role in which for many applications across the operational spectrum (I will discuss exceptions later) they will constitute mopping up forces only.

The U.S. Air Force defines air control or "aerospace control" as the ability to control the combat environment.¹ "Aerospace control permits aerospace and surface forces to operate more effectively and denies these advantages to the enemy."² Once aerospace control has been achieved other missions including strategic attack ("strategic bombing" for World War II purposes) are enabled and the full might of U.S. aerospace forces can be brought to bear against the entire spectrum of enemy capabilities.³

Taken to its logical conclusion "aerospace control" as defined by the U.S. Air Force constitutes an air blockade to the enemy. He can no longer use his own air forces and all of his operations, whether they be air, naval, or ground in nature are endangered. The "no fly" zones established in Iraq are a perfect example of this air blockade. While the current no fly zones limit only the movement of Iraqi air power, it is easy to interpolate to a "no-zone" where all military activity is denied.

Naval blockade in the Mahanian sense can be regarded as the ability of one nation's navy to cut off or extremely complicate the maritime trade of another. This type of operation implies that the blockading nation has gained

¹ Department of the Air Force., Basic Aerospace Doctrine of the United States, Air Force Manual 1-1, Volume 1 (Washington: 1992) p. 10.

² IBID.

³ IBID., p.11.

(possibly by force) the freedom to use the seas as it chooses and has denied this freedom to the blockaded nation. This type of sea-control is analogous to "aerospace control" and although not specifically mentioned in *Forward... From the Sea*, sea control remains the basis for every capability or mission mentioned in that "White Paper".

There are indeed very few nations on the surface of the planet today who could resist or break a blockade imposed by the U.S. Navy. Once again, the Gulf War provides an excellent example of this capability. Iraq could do nothing but watch on CNN as ship after ship was boarded by coalition and U.S. Navy ships enforcing U.N. resolutions.

It is my belief, and I think most of our recent military history supports me on this, that air and naval power have played the decisive role in our wars and will continue to play the most important part of our military operations in the future.

The Role of new Technology and The Preponderance Factor

While not at its zenith, U.S. military power is most certainly at one of its all time high levels. Our fleet roams all the oceans of the world at will and boasts a 12 carrier force that can not be challenged in the near to medium future. Our Air Force recently dazzled the world by its performance in the Gulf War and boasts the newest and best aircraft types in the world. Our ground forces are the best trained and most capable and lethal soldiers in the world. As a nation, we

continue to outspend most of the rest of the world combined on defense and the maintenance of our military industrial capacity. All this in the face of a vaguely defined but certainly diminishing threat.

This preponderance of high quality forces is magnified by the technology edge of our weapons systems. The U.S. advantage in quantity and quality of forces gives us the leverage to fight wars in the manner of our own choosing.

A large peer competitor (LPC) would represent an adversary against whom joint operations would be a necessity for survival. However, there is no such power in the world today and while U.S. force downsizing may give the large peer competitor scenario a realistic possibility sometime in the future, it remains a distant and remote likelihood.

The most likely adversaries for the near to mid future remain the Iraqs of the world. The nations that choose to remain on the margins of the world community. These nations are the ones most susceptible to air and naval forces. They simply lack the resources to challenge our air/naval and technological supremacy and for the most part can be dealt with as Iraq was and defeated (in fact) before we risk our soldiers and marines in close combat. The U.S. relative advantage in the air, on the sea, and in the all important technology area is so great that U.S. military leaders can presume air and sea control! Perhaps this presumption has led to a diminishment in American strategic theory of the decisive character of air/naval power.

Impact of The New World Order

The fall of the Soviet Empire has had significant impact on the United States ability and propensity to wage war.

During the great Cold War with the Soviet Empire (or as some people say, "in the bad old days") each and every use of American military force was necessarily measured and studied with respect to its impact on the Soviets and their possible reactions. With the end of the Cold War, that particular restraint has been vastly mitigated and the U.S. has found itself on the same side of many issues and sharing many goals with the new Russian Republic.

As alluded to in the previous section, we also find ourselves as the last remaining super power with truly worldwide influence and responsibilities.

This set of circumstances is important to the development of my thesis (the unique and decisive nature of air and naval force) for several reasons.

Firstly, the tie in Korea and the loss in Vietnam are directly attributable to the existence of the Soviet Empire and the peer power (to the U.S.) it wielded. Admittedly our air/naval and technological edge was less in those wars than it is today, but still, it was so significant that we should have prevailed. The problem in Korea and Vietnam was the bastion that Soviet (and subsequently, their Red Chinese clients) power and influence provided. It is simply

impossible to gain the full leverage of air and sea power when its use is constrained for political reasons.

Korea - "With the halt of Lt General James van Fleet's offensive in the late spring of 1951, air power became the sole ostensible means of forcing a settlement. Yet the bombing continued to be restricted in scope by both political and military controls."⁴

Vietnam - When asked in July 1986 if the United States could have won in Vietnam, the Retired General Curtis Lemay answered, "In any two week period you want to mention." He elaborated: You can remember what went on at the end, when the B-52's finally went up north and started to bomb up there. They bombed for about seven days, and the white flag practically went up.⁵

The bastion is now gone. A nation at war with the U.S. can no longer count on political restraints imposed on the U.S. military by its civilian leadership. During future

⁴ Mark Clodfelter, The Limits of Air Power (New York: The Free Press, 1989), p. 22.

⁵ Mary-Ann Bendel, "Interview of Curtis Lemay" USA Today, 23 July 1986 p. 9A.

conflicts, the use of the full measure of U.S. air and naval power will be the rule and not the exception.

Secondly, our influence as the sole remaining superpower and our good reputation (i.e. defender of democratic values) gives us the ability to isolate any potential enemy. The Gulf War has confirmed this ability. Who would have thought in 1989 that the U.S. would lead a coalition of mostly Moslem states against a Moslem aggressor nation! This ability to isolate an enemy on its seaward flanks by the preponderance of our naval forces and on its landward borders by our political influence ensures that air and naval fires can be maximized. You can run, but you can no longer hide!

The Definition of Victory

It is true and I can not deny, that if we measure victory by the occupation of geography, then the role of the combat infantry grows proportionately. However, in my opinion, the relative importance of the seizure of territory has diminished since World War II and diminished again since the end of the Cold War. I believe that as we move into the next century, the need to conquer and hold territory will grow less and less important.

As the world grows into a more economically developed and mutually dependent community there will be less and less opportunity for aggressor nations to seize the raw materials of other nations. The cost will be prohibitive and the

unleashed fury of U.N. or U.S. led high tech forces will be devastating to the aggressor's homeland.

Additionally, as the world goes more and more high tech, all nations will become more vulnerable to modern precision weapons. I suspect that Vietnam would have much more to lose now than it did in the 1960's. Although still a nation of jungles there are probably many more targets accessible to our air and naval forces that would have devastating impact on the nation and its people.

In effect, you can't have your cake and eat it too. As a country modernizes and gets up on the information highway, its vulnerability to our high tech weapons increases also. It is in this way, by using our high tech weapons against the semi-modern or modern state that victory in the wars of the future will be achieved.

Historical Analysis

World War II in Europe was most definitely won by the allied land offensive begun at Normandy in June of 1944. Air and naval power played their roles and their respective decisiveness has been argued back and forth. The decisive role of air and naval power in the Pacific during World War II is normally acknowledged by military historians and is quite easy to accept based on the maritime nature of the theatre.

I don't believe the world situation in 1939 can be replicated in the foreseeable future. Nazi Germany and Imperial Japan represent the maximized Large Peer Competitor

scenario. Both nations could challenge the Allied coalition with at least marginal (in the case of Japan) hope for success. The defeat of both powers required multiple and intricately planned joint sequential campaigns. A Large Peer Competitor who threatened the U.S. today would require the same approach - no argument. The utility of the World War II historical cases to my thesis lies in the execution of the two end games. Toward the end of the war, the condition of Germany and Japan approximated what I have described as the most likely U.S. adversary of the future. In the end the Allies possessed preponderant air and naval power with a substantial technology edge.

In Europe the strategic bombing campaign was indecisive until very late in the war. The reasons for its lack of success include a lack of unity of effort, due to bombers being needed throughout the theatre for a myriad of tasks, the necessary support of Overlord (the Normandy invasion), and the inability to wrest air supremacy over Germany, due to the lack of a long range fighter.

The arrival of the P-51 (Mustang) aircraft, which could escort bombers to the objective and engage German interceptors over the target area coupled with huge attacks on the Luftwaffe itself finally produced air superiority for the Allies in February-March 1944. After September 1944, when support for the Allied ground forces became less of a priority, the strategic bombing offensive came into its own.

"Not until the bombing forces launched their systematic

bombing of oil production after D-Day, and their transportation campaign beginning in September, did they inflict wounds that proved to be mortal."⁶

German railroad effectiveness was dramatically reduced and gasoline shortages crippled what remained of the Luftwaffe and Wehrmacht mechanized units. The *United States Strategic Bombing Survey* conducted after World War II concluded that the air offensive had hastened the internal collapse of Germany though not to the point of decisively curtailing German ground operations.⁷

"In the Pacific War the U.S. Navy and Army Air Forces, in combination, struck at the Japanese with such conclusive effect that an invasion was unnecessary."⁸ Throughout the war U.S. submarines waged a cumulative offensive against Japanese merchant shipping ensuring that by August 1944 the Japanese economy was damaged beyond repair. When the strategic bombing offensive picked up steam in the last year of the war, its impact was dramatic. In one raid on Tokyo 267,000 buildings were destroyed and 80,000 casualties inflicted. "The B-29's weakened Japanese civilian morale. The American bombing campaign destroyed confidence in the Army, which was held responsible for the failure to defend the people of Japan."⁹

⁶ Kent Roberts Greenfield, "American Strategy in World War II (Malabar, Florida: Robert E. Krieger Publishing Company, Inc., 1963), p. 113.

⁷ IBID., p. 120

⁸ IBID., pp. 120-121.

⁹ R.A.C. Parker, Struggle for Survival (Oxford: Oxford

The Gulf War represents a real departure point in the study of military operations. Contrary to the popular view that the success of the operation was due to "Jointness" (Jointness certainly contributed to success), the real success of the war was due to the relentless assault launched from the air by U.S. Air Force and Naval units. In the words of General Horner (U.S. Central Command Air Forces), "The dynamic initial air phases set the stage for the successful ground operations with minimum friendly loss of life."¹⁰

The success of the Gulf War was truly unprecedented. The impact of our preponderant force and our technological edge provided for a victory of astounding proportions. Who could have predicted a 100 hour ground campaign or less than 200 American fatalities? Air Campaign highlights include:

- Iraq ended the war with only 15 percent of its electrical power system intact. At the end of World War II Germany had lost 15 percent of its system total.¹¹
- The oil industry was almost entirely shut down.
- Water supply and treatment (including sewer) shut down.

University Press, 1989), p. 171.

¹⁰ Charles A. Horner, "The Air Campaign," Military Review, September 1991, p. 27.

¹¹ Norman Friedman, Desert Victory (Annapolis, Maryland: Naval Institute Press, 1991), p. 182.

- Petrochemical, agrochemical, and fertilizer industries shut down.
- Civilian telephone system shut down.
- Military command and control disrupted.
- Significant damage to Iraqi surface forces.

The embargo imposed by naval surface forces in the Gulf and Red Sea also made a significant contribution to the victory. "By the time of the initial cease-fire, nearly 7,000 ships had been intercepted, and 30 to 40 ships were being checked daily. Many were only interrogated by Bridge to Bridge radio, but about 1,000 had been boarded, and 5 to 10 were being boarded daily. It was estimated that the oil embargo as applied to tankers (that is, not including the effect of closed pipelines) was costing Iraq \$30 million per day, about half its total oil revenue."¹² Additionally, it must be remembered that the vast majority of Tomahawk missiles (about 300) launched against Iraq in the first stages of the Air Campaign were fired by these units.

The ground offensive when launched accomplished more and more quickly than any in history. The soldiers and marines proved that they are the best in the world at what they do, but much of their success was prepared for them by the air campaign. "Although ground action necessarily consummated the final victory for coalition forces, air power

¹² IBID., p. 72.

had made the final assault as effortless as a wartime operation can be."¹³

What About The Ground Forces?

Throughout this paper I have stressed the unique contributions that only air and naval forces can bring to military operations. However, there are some applications across the operational spectrum where only ground forces will suffice and others where they would be the decisive force in a truly joint operation.

I believe the true effective use of ground forces to be at the extreme ends of the operational spectrum. In a global war with an adversary of equal strength the United States would have to pursue strategies similar to the ones used in World War II. In this type of war the ground force would probably play the dominant role as victory would have to be achieved through sequential, overlapping campaigns aimed along one or more axis of advance. The acquisition of territory for bases and defense-in-depth would almost certainly be a requirement. In this scenario, air and naval forces would certainly play the enabling and supporting role. A war against a reconstituted Soviet Union or China (provided it did not go nuclear) would fall into this category.

¹³ Eliot A. Cohen, "The Mystique of U.S. Air Power", Foreign Affairs, January/February 1994, p. 111.

At the other end of the operational spectrum lies operations other than war. These operations will almost always be manpower intensive and well suited to ground force capabilities. I expect air and naval forces to play the enabling/supporting role here also.

Counter-insurgency operations would of course have to built around small elite ground forces. History has shown what little impact air and naval forces have when used for this mission. Other low intensity situations, such as evacuations, hostage rescue, and police actions are undeniably the domain of the ground forces.

Counter Arguments

Both *Forward...from The Sea* (U.S. Navy) and *Global Presence 1995* (U.S. Air Force) stress the joint aspects of warfighting. Both of these "White Papers" highlight the enabling role of air and naval power. *Forward...from the Sea* would de-emphasize the Mahanian concepts that have guided the Navy since the 1890's. The most effective use of the fleet (including the Marine Corps) is now seen as its ability to provide peacetime forward presence and overseas crisis response. "They (naval forces) contribute heavily during the transitions from crisis to conflict and to ensuring compliance with terms of peace."¹⁴

¹⁴ U.S. Navy Department., Forward... From the Sea, (Washington: 1994). p. 1.

The Basic Aerospace Doctrine of the United States

Air Force is slightly more flexible in that it suggests in places that air power has independent capabilities. However, the main emphasis seems to be predominantly on a supporting role, subordinated to the overarching needs of the ground component.

Global Presence 1995 emphasizes the Air Force's ability to couple worldwide situational awareness with physical global and/or virtual presence. It also stresses the Air Force's unique capability to project power worldwide in minutes or hours, with little or no warning.¹⁵ However, it clearly avoids any reference to the viability of Air Forces in a sustained stand alone (classic air power theory) mode.

Conclusions

The current advantage enjoyed by U.S. military forces due to preponderance, technological supremacy, and the political advantage incumbent with sole super-power status have maximized the potential decisiveness of air and naval forces. Contrary to the conventional wisdom, air and naval strategists should be thinking about the ways in which their unique and decisive capabilities can be best utilized, even in single service situations. The history of the air and naval operations conducted in World War II and most

¹⁵ Department of the Air Force., Global Presence 1995 (Washington: 1995), p. 16.

importantly in the Gulf War showcase the truly spectacular results that can be achieved.

The Joint approach to warfare is a good approach. The synergy that it develops is a true force multiplier and should be pursued. However, to exclude all other approaches and to insist that all future military operations will be Joint in nature (by decree) is a mistake. Our focus should be to win decisively in the most effective way, it should not be to ensure that all services are included in every operation. To coin a phrase from our Operations course, "why use all the tools in our "toolbox" when only one or two will create the necessary conditions for victory?" Would not a purely naval force (marines included) have been more effective in Haiti?

Ground forces continue to be needed. In operations other than war, certain low intensity conflict situations, and global war (conventional) they will of necessity be the dominant force and should rightfully insist upon a supporting role from the air and naval forces. To establish doctrine that routinely relegates air and naval forces to an "enabling" or supporting role ignores the historical evidence.

Finally, I believe that if we stress the decisive nature of our air and naval forces we can save lives (ours and the enemy's), resources, and most importantly, we will be able to repeat the outstanding results achieved during the Gulf War.

BIBLIOGRAPHY

Cable, James. Gunboat Diplomacy 1919-1979. New York: St. Martin's Press, 1981.

Clodfelter, Mark. The Limits of Air Power. New York: The Free press, 1989.

Cohen, Eliot A. "The Mystique of U.S. Air Power." Foreign Affairs, January/February 1994, pp. 109-124.

Corbett, Julian S. Some Principles of Maritime Strategy. London: Longmans, Green and Co., 1911.

Friedman, Norman. Desert Victory. Annapolis, Maryland: Naval Institute press, 1991.

Gray, Colin S. The Leverage of Sea Power. New York: The Free Press, 1992.

Greenfield, Kent R. American Strategy in World War II. Malabar, Florida: Krieger Publishing Company, Inc., 1963.

Horner, Charles A. "The Air Campaign." Military Review, September 1991, pp. 16-27.

Mahan, A.T. The Influence of Seapower Upon History 1660-1783. New York: Dover Publications, Inc., 1987.

Overy, R.J. The Air War 1939-1945. Chelsea, Michigan: Scarborough House Publishers, 1980.

Parker, R.A.C. Struggle for Survival. Oxford: Oxford University Press, 1989.

U.S. Air Force Department. Basic Aerospace Doctrine of the United States Air Force. Air Force Manual 1-1, Volume 1. Washington, 1992.

U.S. Air Force Department. Global Presence 1995. Washington, 1995.

U.S. Navy Department. Forward...From The Sea. Washington, 1994